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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,422	09/10/2003	Kazuto Kinoshita	241812US3DIV	3186

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EXAMINER

PADGETT, MARIANNE L

ART UNIT PAPER NUMBER

1762

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,422

Applicant(s)

KINOSHITA ET AL.

Examiner

Marianne L. Padgett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/1/2005 & 10/19/2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31 and 32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 31-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. or in a applicant is 10/19/2005 remarks are noted to supply support for new features in the claim by footnote giving paragraph numbers, however the specification in the examiner's electronic file has NO PARAGRAPH NUMBERS, although the examiner notes that support for the newly added limitation to "a liquid developer" was found in the last paragraph of the specification that bridges pages 26-27.

2. Claims 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 31, non-idiomatic English phrasing has been employed, specifically in line to "try washing the substrate to introduce the substrate", which appears to misuse "to", which should possibly be replaced with --by--.

In lines 5-6 of claim 31, "decomposing organic substances deposited on the surface of the substrate with the... lamp" (emphasis added) is ambiguous, since there are two different actions that the "with" clause may refer back to, i.e. as written the lamp may cause the deposit or the decomposition of the organic substances.

In line 7-8 of claim 31 the phrase "... to cause reactions with the decomposition of the organic substances..." has ambiguous meanings, as it implies but does not exactly state that the $[H\cdot]$ & $[OH\cdot]$ react with the decomposition [products], but might also be read equivalently to possibly mean the active members cause reactions of the decomposition. Given that claim 32 does explicitly recite reaction with decomposition products, it is suspected that the former is intended, but the claim should be clear.

The claims employ brackets, [], around the specifically claimed species produced by the lamp from splitting water, and while double brackets are now supposed to be used for deletion in amendments, single brackets are still frequently seen, and as far as the examiner knows will be considered symbols for deletion by the printer, hence use of such brackets as actual symbols in the claims is highly

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nonrecommended, as it will potentially cause serious problems with the printed claims if/when this case goes to issue.

Use of relative terms in the claims is vague and indefinite, unless clear definition therefore is provided in the claim, or in a clear definition in the specification or in cited relevant prior art. In claim 32, the limitations "to improve the contact angle..." & "thus improve the surface" are relative phrases, since improvement can encompass either increasing or decreasing contact angle, depending on particular needs and desires for particular processes or end uses, i.e. not all material start out with the same contact angle, nor are affected in the same way by the claimed [H·] & [·OH], nor does improvement necessarily mean an decrease in contact angle, since one does not know what the contact angle originally was nor what change is desired/needed to cause "improvement".

Also in claim 32, the limitation of "liquid developer" has no clear meaning due to a lack of context in the claim, or in other words there is nothing claimed about the substrate that can be developed, so it is impossible to determine what might be being deposited, i.e. it is unclear if the deposited liquid is intended to read on almost any liquid that can have some effect of depositing or removing, etc., or if it is intended to mean some particular class of compositions.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 31-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,821,906 B2. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because of reasons as set forth with the previous claims in section 2 of the action mailed 7/19/2005. The new claims partially paraphrase the previous claims, such that they remain directed to overlapping scopes, where the patent is more specific on topics of atmosphere movement, and the present claims give a more mechanistic description of how reactions with contaminants occur. Some features of the patent, now overlap or are the same as those in the new claims of the present case, such as the specific mechanistic descriptions, of reacting the $\bullet\text{OH}$ and $\bullet\text{H}$ with the decomposition products or contacting are equivalent or inherent occurrences. Note that humidifying inert gas as in the patent is equivalent to a mixed atmosphere of inert gas and water vapor.

It is also noted that the new claims require "a substrate surface on a moving conveyor" which is considered to be substantially equivalent to "horizontally transferring" or "transferred horizontally across..." of the previous claims & the (906) patent, respectively,, as use of a conveyor is a standard in conventional means of doing the generic motion, thus an obvious species of the genre or class of motions, which provides no patentable significance to the process by claiming a standard means of moving a substrate of unspecified shape, material, use, etc.

It is also noted, that in neither claim does the claim language require any particular order for doing the "dry wash"/lamp steps and the wet washing or additionally in claim 32 applying the liquid developer, since order of listing does NOT necessitate or require a particular order of doing, unless specified by claim language, such as temporal or antecedent basis, which is not present in the claims as written.

5. Applicant's arguments filed 10/19/2005 & 11/1/2005 and discussed the have been fully considered but they are not persuasive.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on Monday-Friday from about 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. L. Padgett/dictation software

7/24/2006


MARIANNE PADGETT
PRIMARY EXAMINER